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Attorney Docket No.: 42.P12963

Application No.: 09/598,680

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### REMARKS

Claims 1-9 and 11 remain pending. Claim 10 has been canceled.

In the Office Action, the Examiner rejected claims 1 (and presumably its dependent claims) and 10 under 35 U.S.C. § 112, ¶2; and rejected claim 1 (and presumably its dependent claims) under 35 U.S.C. § 101.

**New grounds of rejection in the fourth consecutive non-final action constitutes piecemeal examination under M.P.E.P. § 707.07(g):**

Applicants doubt the propriety of raising § 112, ¶2 and § 101 rejections in a fourth non-final Office Action. If there really were such serious issues with the claims, one would think that the Examiner would have raised them earlier in one of the three prior Office Actions. Applicants are unsure where these new, piecemeal rejections are coming from at this late date in prosecution, but they are without merit as explained below.

**§ 112, ¶2 rejections:**

The cancellation of claim 10 obviates its § 112, ¶2 rejection.

Applicants respectfully submit that claim 1 and its dependent claims meet the “threshold requirements of clarity and precision” referred to in M.P.E.P. § 2173.02. The plain meaning apparent to those skilled in the art of “best estimates x’ ” is “best estimates denoted by the algebraic symbol x’.” Similarly, the plain meaning apparent to those skilled in the art of “transmit values y” is “transmit values denoted by the algebraic symbol y.” Such mathematical shorthand is common, well-understood, and meets the “threshold requirements of clarity and precision” required by § 112, ¶2. The rejection of claim 1 should be withdrawn on this basis, and on the basis of the foregoing explanation, which will be part of the prosecution history.

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**§ 101 Rejection:**

**A. No *prima facie* case has been established.**

The sum total rationale for the § 101 rejection, quoted from page 2 of the Office Action, is:

The claimed subject matter fails to result in a physical transformation nor does it appear to provide a useful, concrete and tangible result.

This is a bare legal conclusion, and does not meet the Examiner's evidentiary burden of establishing a *prima facie* case of unpatentability. The Examiner has not "explain[ed] in the record the basis for why a claim is [considered to be] for an abstract idea with no practical application." (See Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility (22 November 2005), Section IV(D) "Establish on the Record a Prima Facie Case.")

Because a *prima facie* case of unpatentability has not been established, the stated § 101 rejection is improper and should be withdrawn.

**B. Such a case cannot be established.**

For completeness, Applicants note the following. Claims 1-9 and 11 as a whole are useful and produce at least the practical result of compensating for inter-modulation distortion (IMD) present in signals received from a second modem. Compensating for inter-modulation distortion is decidedly useful and practical. See the Background section of the specification, pages 3-7. To characterize any of these claims, as a whole, as not being useful is incorrect.

Reconsideration and allowance of pending claims 1-9 and 11 is respectfully requested.

In the event that any outstanding matters remain in this application, Applicants request that the Examiner contact Alan Pedersen-Giles, attorney for Applicants, at the number below to discuss such matters.

To the extent necessary, a petition for an extension of time under 37 C.F.R. § 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account No. 50-0221 and please credit any excess

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fees to such deposit account.

Respectfully submitted,

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Alan Pedersen-Giles  
Registration No. 39,996

c/o Intel Americas  
LF3  
4030 Lafayette Center Drive  
Chantilly, VA 20151  
(703) 633-1061